NORTHUMBERLAND & DURHAM

MEDICAL SOCIETY.

JANUARY 12, 1881.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

THE FOURTH MONTHLY MEETING was held in the Library of the Newcastle-on-Tyne Infirmary, on Thursday, January 13th, 1881—Dr. Eastwood (the President) in the chair.

The following gentleman was elected a member of the Society :—

E. Stiven, M.D., Sunderland.

The following gentlemen were proposed for election :—

John F. Le Page, Brandon.
Hugh Russel, M.D., Ferryhill.
Motherwell Duggan, M.R.C.S., Castle Eden.
David McNeilage, L.R.C.P. Ed., Spennymoor.

PREVALENT DISEASES OF THE DISTRICT.

Mr. HENRY E. ARMSTRONG presented the following :—

Return of Admissions to, and Deaths at, the Newcastle Fever Hospital during the Month of December, 1880.

	Admissions.	Death.
Enteric Fever	2	1
Pleuro-Pneumonia	1	0
Total	3	1

The fatal case was that of a young man, a miner, and was due to chronic pneumonia, from which the patient appears to have suffered for a considerable time prior to his contracting enteric fever. Death occurred on the 38th day. The patient was admitted on the eleventh day of fever. He then had rose spots. The case was not severe. Two days afterwards, a scarlet eruption appeared on the forehead and chest, afterwards extending to the abdomen, and remaining visible four days. There was also some congestion of fauces. During the course of this eruption, fresh rose spots appeared, and the old ones faded, and there was ochrey diarrhœa. The evening temperature averaged about 104° Fah. A point of great interest in the case is the occurrence of the scarlet rash during the course of the enteric fever. Although there was no subsequent desquamation, it is probable that this eruption was scarlatinal. If this were the case, the question arises, "Where was the scarlet fever contracted?" There was a severe case of that disease in the hospital at the time of the patient's admission. There

is no adequate means of isolating one disease from another in the present Fever Hospital, the different wards on each flat communicating by means of corridors with the general staircase.

Mr. SPEAR referred to the prevalence and fatality of scarlet fever in the county of Durham, and thought that this Society—representing, as it did, medical opinion of the county—might well take the subject into special consideration, with a view of impressing upon local sanitary authorities the necessity of adopting decided measures against the spread of this disease. First, amongst such measures, would be the provision of hospital accommodation. His experience convinced him that in the case of scarlet fever, isolation was, for various medical reasons that he need not now enter upon, of peculiar value; and he found that the supposed insurmountable objection that parents had to the removal to such institutions of their children was not in practice realized.

The PRESIDENT said that several cases of scarlet fever had been reported to the rural sanitary authority at Darlington as having occurred at the villages of Heighington and Aycliffe. They were found to be imported cases, and after being properly attended to, they did not spread any further.

Mr. H. E. ARMSTRONG could scarcely accept Mr. Spear's opinion that old people were less susceptible to the scarlet fever poison than children. He would like to see such a proposition carried out as suggested by Mr. Spear, but he feared it would not be practicable.

Mr. SPEAR thought that if Mr. Armstrong would consult authorities on the subject, both those who had examined the question as clinicians and those who had investigated it from a statistical point of view, that he would find them unanimous in regarding age as a protective factor against the scarlatinal poison. As to the workability of a hospital in the case of scarlet fever, he considered that a good medical officer of health, with a good hospital at his back, would be able to get every case of the disease that it was necessary to remove, removed; and he quoted instances in support of this assertion.

Mr. H. E. ARMSTRONG drew the attention of the Society to the need of a free Fever Hospital in Newcastle, and moved the following resolution:—"That this Society represent to the Corporation of Newcastle-on-Tyne the desirability of providing, out of the funds of the St. Mary Magdalene Hospital, hospital accommodation, free of charge, for the sufferers from infectious disease in this town." In proposing this resolution, Mr. Armstrong made some remarks in favour of the subject, the substance of which has appeared in the December transactions of the Society.

The resolution was not seconded.

The PRESIDENT stated it as his opinion that it was the duty of sanitary authorities to provide free hospital accommodation for fever patients.

Mr. H. E. ARMSTRONG stated, in reference to the opinion expressed by the President—viz., the law empowered sanitary authorities to maintain, at their own cost, sick persons in fever hospitals—that he (Mr. Armstrong) was advised that the Public Health Act, 1875, authorized the removal to, but not the maintenance in hospital, of such persons.

PATHOLOGICAL TRAY.

Dr. PHILIPSON presented a specimen of aneurism of the pulmonary artery. The aneurism was about the size of a large hazel nut, and was situated in a tubercular cavity, near the apex of the lung. The man, aged 45, was admitted into the Newcastle Infirmary for chronic bronchitis, and succumbed from this condition and general debility of the system. At the autopsy, the lungs were both firmly adherent to the chest wall by old adhesions. In the upper lobes of both lungs old tubercular cavities, of about the size of walnuts, were found, in one of which, in each lung, an aneurism was discovered. At other places, the tubercle was degenerated into hard cretaceous masses.

Dr PHILIPSON expressed his belief that the aneurisms were the result of diminished pressure in the excavations, the vessels dilating in consequence thereof. He stated that the specimen was of considerable interest in a pathological point of view, but of much more value clinically, as he was of opinion that, in fatal hœmoptysis, in the majority of cases, the rupture of an aneurism of the pulmonary artery was the cause of the occurrence.

Dr. ARNISON showed a uterine filroid, the size of a very large orange, which he had removed from a lady of 45 years, a patient of Mr. Le Page, of Brandon. Symptoms had existed about eighteen months, but, in spite of frequent exhausting hemœrhages, the patient refused any examination until quite recently, when Mr. Le Page found the tumour filling the vagina. It was removed by the ecraseur. Owing to its great size some difficulty was experienced in getting the wire over it, and also in getting it extracted from the vagina.

Dr. ARNISON also showed a warty growth, which he had removed by the ecraseur from the cervix uteri of a patient of Dr. Douglass, of Gateshead, who had discovered it when attending her

in confinement a few weeks previously. It was then a small nodule on one side of the os, but in three weeks it quite surrounded the os. It had some points of resemblance to a malignant growth, but, owing to the absence of some characteristic signs of malignancy, it was believed to be non-malignant; and Dr. Drummond, who had kindly examined it, pronounced it to be a myoma. Both patients had made good recoveries.

Dr. Drummond showed the heart, spleen, and kidneys taken from the body of a man, aged 45, who died in the Infirmary a fortnight before. The patient on admission was found to be suffering from cardiac dropsy—especially of the lower extremities—dyspnœa, and cough. His face was cyanotic, his position in bed and appearance generally that of a man suffering from extreme obstruction of the circulation in the heart. He had never suffered from acute rheumatism, but had complained of "rheumatic pains." His illness dated eighteen months back, and he ascribed his condition to cold and hard work. Physical examination of the heart revealed a systolic bruit of a soft character, heard best at the apex, *i.e.*, $2\frac{1}{2}$ inches below the left nipple—for the apex beat was depressed and pushed to the left; as also the fact that the area of dullness was much increased. The lungs were much congested and œdematous, as shown by fine moist crepitus resembling the "crepitus redux," with somewhat diminished resonance on percussion. The patient rapidly grew worse, and succumbed a few days after admission. The heart was much enlarged, weighing nearly 18 ounces. The left ventricle was hypertrophied, but the right was especially altered, being much dilated. The aortic and pulmonary valves were healthy. The mitral orifice was somewhat dilated, admitting of some regurgitation, whilst the tricuspid opening was very much dilated. The spleen, lungs, aud kidneys contained several infarcts—some old and others recent.

Dr. Drummond also presented the stomach, lungs, liver, and kidneys taken from the body of an old woman aged 61, who recently died in the Newcastle Infirmary. On admission she was markedly emaciated and cachectic; the lower extremities were œdematous, and the abdominal cavity much distended with fluid. For some months gastric symptoms had been complained of—nausea, vomiting, pain after food, &c. Three months from admission she first noticed the dropsy. Owing to the extremely distended state of the abdominal walls with ascitic fluid, it was impossible to make out by palpation the presence of a tumour. The liver seemed to be small. The view was taken that the patient was suffering from malignant disease, but of what organ was not clear. The *post mortem* revealed the fact that the stomach had been the primary seat of the disease. The pyloric half of the viscus is in-

filtrated with deposit of scirrhous cancer, but the communication of the stomach with the duodenum is not much interfered with. The mesenteric glands were largely implicated, accounting for the dropsy. The right lung was collapsed from pressure of fluid. The liver was remarkably small and dense, also the result of pressure. The kidneys were exceedingly interesting; the pelves of both were much dilated, and the glandular substance reduced in thickness—thus, there was double hydronephrosis. On the surface of each kidney were seen several infarcts, some apparently quite recent. The valves of the heart were healthy.

Dr. DRINKWATER said: Mr. President and gentlemen,—The case which I have the pleasure of exhibiting to this Society is that of a man, aged 60 years, a grocer, who for the past 20 years has suffered from eczema of both legs. He first came under my care on the 12th October last, three months ago. At that time the disease was worse than it had ever been, and was rapidly spreading *towards* the hips. It extended from the middle of each thigh to the toes, involving the entire surface, except the plauter aspect of each foot. The legs were greatly swollen; the surface was marked with large and numerous cracks; there was a very copious transudation of fluid; the skin was very painful, and the patient could only walk with considerable difficulty. The treatment was exclusively *local*. Ung. Zinci. oleat was used, and produced improvement so rapidly that now, three months after the beginning of treatment, the disease is cured, except in the middle portion of the leg. Above the knees one can scarcely see any trace of the disease. There is still considerable *induration* and pigmentation above the ankle, but no cracks, and the surface discharge has ceased. The man is better now than at any time during the last 17 or 18 years. I have now treated many cases of eczema of long standing, and in each case have had very good results with the oleat of zinc ointment, many cases of which had been treated with other applications without any amelioration taking place; so that I am inclined to regard it as a *specific* for eczema, of whatever type it may be.

NOTES OF A CASE OF HERNIA IN WHICH A DIAGNOSTIC SIGN NOT USUALLY NOTICED WAS OBSERVED.

By G. Y. HEATH, M.D., Consulting Surgeon to the Newcastle Infirmary.

On the evening of the November meeting of the Medical Society, I was summoned to a case of intestinal obstruction in a patient of Dr. Wilson's, of Wallsend. At the time of my visit, the patient, a man between 50 and 60 years of age, showed all the signs of a somewhat advanced stage of intestinal obstruction; a largely distended belly, feculent and constant vomiting, dark marks below the eyes, a quick small pulse, and sweating.

I looked at the groins; there seemed no hernial swelling in either; but a careful comparison of the two sides revealed a certain fulness on the right, in the region of the inguinal canal, but indistinct, and masked by the extreme distention of the overhanging belly. Applying now percussion, with the view of making out if any internal cause of obstruction existed, my attention was suddenly arrested, whilst striking the right side of the belly, by a peculiar appearance in the right inguinal region. At the moment of striking the right side of the belly, a sudden and rapid protrusion was seen about the centre of the inguinal canal, as if a finger had been pushed downwards and outwards from the internal ring into the canal and against the inner aspect of the front wall of the canal.

This appearance was instantaneous, and vanished as suddenly as it had occurred, but occurred each time the tapping of the tense belly was repeated.

Dr. Wilson now related the previous history of the case.

History.—The patient had for some time been subject to a right scrotal rupture—(reducible); but on the morning of the Tuesday before I saw him, about 1 a.m., having no truss on, he awoke in great pain, and was unable to return the rupture. He was seen about 6 a.m. by Dr. Wilson's assistant, who, with some difficulty, reduced the rupture. The patient was relieved at the time, but the pain subsequently returned, and the symptoms present at my visit gradually developed.

Under these circumstrnces, I advised that the right inguinal canal should be opened, and the sac of the hernia within the canal examined.

Dr. Wilson agreeing with this suggestion, it was carried out, the patient being placed under the influence of chloroform. Immediately after opening the sac, an energetic action of the diaphram took place, and simultaneously a small discoloured knuckle of bowel presented itself at the opening in the sac. Seized with the fingers and examined, the bowel did not seem so much injured but that it might be fitly returned. A flat director was therefore

gently insinuated through the strictured neck of the sac, and a slight division practised. The stricture, more fully dilated by the finger, then permitted the bowel to be returned.

The wound, about $2\frac{1}{2}$ inches long, was washed out with 1-20 carbolic wash, and afterwards stitched up, except the lowest half-inch, left open for drainage.

Relief to the more prominent symptoms followed immediately upon the operation; but 36 hours after the operation, the outlook was not promising. Vomiting had returned, though not fæcal, the pulse was over 100, and small, and the facial aspect was anxious; at the same time it was reassuring that wind had passed downwards, although there had been no stool; the tightness of the belly, too, had diminished. The upper half of wound had healed by first intention, but the lower half was open, and the immediate neighbourhood was swollen and the skin red. Altogether the condition was doubtful, and I left the house feeling that, within the next 48 hours, I might hear of a fatal result. This was not the case, however, and the next time I saw my patient, some three weeks after the operation, he walked into my consulting room quite well.

Remarks.—This case presents some points which it may be interesting to discuss, and the discussion may elicit opinions adverse to the treatment adopted.

First, as to diagnosis. The condition of the patient when first seen by myself, and without the light which the previous history afforded, pointed unmistakably to intestinal obstruction, but gave no absolute indication of the pressure of a piece of bowel nipped in the neck of the sac at the internal ring. The history of the former events in the case showed the existence of a scrotal rupture, which to all appearance had been reduced.

The slight fulness apparent in the right inguinal, on comparison of the two inguinal regions, was readily accounted for by the presence of an empty sac; this explanation agreeing also with the history of a successful reduction of the rupture.

The remarkable sign coincident with percussion of belly was open to various explanations.

1. Undulatory movements of matter, gaseous or liquid, contained in the peritoneal cavity and excited by percussion of the belly, might have caused a wave to pass through fluid in the sac; but in this case the intestinal contents of the sac must have been actually returned into the belly, and the neck of the sac must have been patent. No such wave could have passed into the sac if it contained bowel strangulated by a tight stricture in the neck of sac at the pit ring.

2. Was it possible that an energetic stroke upon the drum-like belly might really have driven down a piece of bowel into the sac

in the canal? This was, I think, very unlikely; but at any rate, like the former supposition, it necessitated an empty sac and a patent neck and internal ring. According to neither of these suppositions did the peculiar sign observed help us to the cause of the obstruction.

3. Nor could it be thought that, supposing the hernia not to have been entirely returned, and a piece of bowel still lying in the sac and nipped at the internal ring, any wave produced in the belly could have been propagated directly to the contents of bowel so lying in the sac; for the tight stricture must have blocked such a movement.

4. Supposing a piece of bowel lying in the sac, and nipped at the internal ring, it might be that a wave originating in the belly, and impinging on the tense wall at the seat of the stricture, should transmit its movement to the wall itself at the seat of the stricture, and thus set up a movement in the fluid contents of the bowel, and even give rise to a forward movement of the bowel itself; which would account for the protrusion observed. From this reasoning, it is plain that the sign observed might be interpreted either as favouring the view stated in the history of the case, viz., that the rupture had been returned, that the sac was empty and its neck patent—that, in fact, the case was not one of strangulated hernia, and that the cause of the existing obstruction was to be sought elsewhere: Or as favouring the view that a small knuckle of bowel had escaped reduction, and was actually then lying nipped at the internal ring; in other words, that the case before us was, in fact, a case of strangulated hernia. My own opinion at the time, based on all the facts of the case, and particularly upon the appearance and behaviour of the sign we are discussing, certainly was that the second interpretation of the sign was the true one, and that the case before us was a case of strangulated hernia.

I may perhaps be allowed to say that hernia has always been a favourite subject of mine, and that its diagnostic signs have been a favourite study. It is many years now since I began to apply the stroke-test, or percussion, to hernia, and I have often experieneed its utility, and have pointed this out to students. In fact, if the stroke-sound drawn from a tumour in a hernial region—*e.g.*, in the scrotum—is an air-sound, it is a positive sign which can hardly arise from anything but intestine contained in a hernial sac. The converse result of the strokes is merely negative, and affords no certain indication of the nature of the swelling.

I would observe, in passing, that the writer of the article, "Hernia," in "Holme's Surgery," states that if a hernial sac contains liquid and air, the stroke-sound is dull; but I cannot agree with this, as I think, in such a case, the air would rise to the surface and an air-sound would follow the stroke.

However, in the case which I am relating, it was impossible to apply the stroke to elucidate the nature of the small and sudden protrusion which showed itself in the manner related, as the swelling retreated too rapidly to allow of its seizure and fixation for the purpose of applying the stroke, as one can sometimes fix an encysted hydrocele of the cord occupying the canal, and emerging suddenly through the gut-ring under a diaphragmatic impulse. In fact, the absolute diagnostic value of the sign described was limited to the distinct addition given to the ambiguous appearance presented by the right inguinal canal.

The sign, therefore, gave powerful and additional weight to the other evidence, viz., the comparative fulness of the right canal, and upon which I formed the opinion that the canal should be opened.

Now, with regard to the treatment adopted, it may, perhaps, be considered by some surgeons that there was not sufficient evidence to warrant the performance of a somewhat serious operation upon a man who, undoubtedly, in the condition he was, had no vitality to spare. Well, for that very reason, we must remember that if nothing could have been done to alter his condition, his life was not worth four hours' purchase.

But putting this to one side: I wish to put my opinion broadly before the Society that, according to the recognised rules of surgery, the only proper course to pursue was the one actually taken.

I believe there is no rule in surgery more universally acknowledged as sound, and, indeed, *imperative*, than the rule which states that when a patient exhibits the signs and symptoms of intestinal obstruction, and there is also present any doubtful or ambiguous condition or appearance at any of the sites of hernia, it is the *duty* of the surgeon to cut down upon and explore the site in question. Cooper did this in the case of a woman admitted into Guy's Hospital with symptoms of obstruction, and in whose groin, at the saphenous opening, a small swelling existed, pronounced by himself and others to be a lymphatic gland. Nevertheless, acting on the afore-mentioned rule, he cut down upon and explored the femoral canal, with the result of confirming his own opinion of the nature of the visible swelling at the saphenous opening, and which really was a lymphatic gland, but also with the result of discovering behind the gland and within the canal a knuckle of strangulated bowel, which he reduced, and his patient recovered.

I have myself upon several occasions followed a similar course, and often with a similar result; and in the present case, even in the absence of the peculiar sign I have described, and relying simply upon the very slight difference in the appearance of the two canals, I should have felt that my patient would not have had justice done him, and would have been defrauded of his chances of life had I not pursued this practice.

I am the more emboldened to press this rule upon the notice of the Society because in my experience I have found the operation a very successful and, upon the whole, a safe operation—safe even when performed upon persons at the extremes of life, for among my patients have been persons of 80 and even 90 years of age and children under a year old.

NOTES ON TWO RECENT OPERATIONS FOR THE RELIEF OF STRANGULATED INGUINAL HERNIA.

By FREDERICK PAGE, Surgeon to the Infirmary and to the Children's Hospital, Newcastle-upon-Tyne.

At our last meeting, sir, I had the pleasure of showing the Society, as an example of the good result of early operation, a man who had been successfully cut for the relief of a strangulated inguinal hernia six hours after the descent of the gut. Since then two other cases of strangulated hernia, requiring operation, have come under my care. In both cases, as indeed in every case of hernia, there are points of interest, but none of so much importance as the necessity for early operative interference. In comparison with this practice the method of operating, whether by the extra or by the intra peritoneal division of the stricture, is a matter of comparative small importance. In Holmes' "System of Surgery" Mr. Birkett, alluding to a remark made by Mr. Hey, of Leeds, that he lost three patients in five upon whom the operation was performed, asks the question : "Are the results of strangulated hernia more successful at the present day?" and adds—"We fear not." Sir A. Cooper reported 77 cases, of which 36, nearly half, proved fatal ; and Turner collected records of 545 cases, of which 260, not far from half, again were fatal." In our own Infirmary, where, for some reason or other, the operation for strangulated hernia is by no means common, during the last eleven years there have been 36 patients cut, and of these 12 have died ; so that our more recent hospital statistics are clearly better than Sir A. Cooper's. The fatality following herniotomy in hospitals, however, is not quite a fair criterion of the actual mortality following the operation. Hospital cases undoubtedly include a large proportion of patients in a condition unfavourable for a good result. A surgeon will often operate upon his patient himself if he thinks the case likely to do well, and as naturally send the patient to a hospital if he thinks he is not likely to do well. Hence, from this and other causes, it happens a large proportion of the unpromising cases are hospital patients.

I believe the reason our statistics are better at this Infirmary than those I have quoted is due to the circumstance that patients are sent into the Infirmary and relieved at an earlier stage in this neighbourhood than in some others where the results are more unsatisfactory ; and I think this explanation is to some extent borne out by the relatively large proportion of hernias which are reduced at the Infirmary without operation. I hope, too, so far as they go, these statistics may be taken as some indication that Mr.

Birkett's fear as to the result of herniotomy not being better now than in the time of Mr. Hey and Sir A. Cooper is unfounded.

It would be difficult to obtain reliable evidence of the mortality following herniotomy in private practice, and if it were found a larger number of patients recovered after being operated upon in private practice than in public institutions, I believe one word—time—would better explain such a result than any other circumstance.

During the evening of December 12th a man arrived at the Newcastle Infirmary, from a neighbouring town, suffering from an oblique hernia on his left side. He was a Norfolk labourer, aged 33 years, a well-developed, muscular, and healthy-looking man. He had worn a truss for a double rupture for some twelve years. At 10·30 p.m., December 11th, on going to bed, he removed his truss as usual, and then, at that time, the hernia came down on his left side. He at once became faint, felt sick, and could not return the rupture, as he had been able to do on previous occasions. The next morning he took some aperient pills and vomited afterwards. Later in the day he was seen by a surgeon, who endeavoured, for an hour, to reduce the hernia, but could not succeed, and finally sent him to the Newcastle Infirmary. Here, attempts to return the gut were repeated under chloroform, but with no better result. I saw him at 9 p.m. There were no urgent symptoms. The pulse was hardly affected—his countenance expressed no anxiety—there had been no vomiting but once—immediately after taking the pills in the morning. The scrotum was distended, on the left side, to about the size of a duck egg—tense and tender, but not discoloured. Percussion over the inguinal canal, and a little to the scrotal side of the external abdominal ring, gave a clear note, and below, over the scrotal swelling, a dull note. The clear and dull areas were separated from each other by a well-marked sulcus. No fœces nor flatus had passed since the descent of the hernia. The patient was placed in a bath as hot as he could bear, and kept there till he was on the point of fainting, and while he was in the bath, I tried to reduce the hernia, but failed. He was then chloroformed a second time, and being still unable to make any impression upon the swelling, I cut down upon and exposed the sac. Failing, at this stage, to relieve the gut, the sac was opened. It contained some clear bloody fluid, and projecting through the external ring was a small knuckle of gut, the colour of port wine. A few fibres were divided at the east ring, and then, with some difficulty, the finger could be insinuated into the canal. At the internal ring there was a very tight stricture, and upon it being divided, the gut was gently persuaded into the belly. The wound was treated antiseptically. A sharp attack of orchitis followed the operation, and the wound did not quite heal by the first intention. An enema was adminis-

tered on the eighth, and a dose of castor oil on the tenth day. The man has made a good recovery.

The symptoms in this case were so slight that one might have been tempted to defer operating, but the condition of the gut at the time of operating—about 24 hours after its descent—was such as to make me very glad I had not yielded to any such temptation. It is significant that more urgent symptoms should not have shown themselves, considering the state the gut was found to be in. The case shows that in dealing with an acute hernia, even where the symptoms of strangulation are but slight, it is better to operate at once than to delay till more urgent symptoms arise. I doubt whether the gut in this case would have recovered itself if its release had beendelayed till the morning.

The following is an example of the terrible result of delay in relieving a strangulated hernia. A week or two ago I saw a man, 60 years of age, with a strangulated left inguinal hernia. The gut had been down 79 hours. The belly was distended. The skin over the hernia was dark and tense, and on the apex of the swelling there was a vesicle containing bloody fluid. It was evident the gut was dead, for, as John Hunter pointed out, "so long as the gut in the sac is alive, no inflammation takes place in the integuments; but the moment the gut becomes mortified the stimulus of an extraneous body takes place," and an outlet is sought for it through the skin by means of destructive inflammation. The man was vomiting stercoracous matter, had hiccough, and evidently, unrelieved, could live but a short time. It was impossible to refuse to afford him the only chance of recovery, feeble as that chance was. He was placed under chlorform and the gut cut down upon. It was black, and had the unmistakeable odour of gangrene. In a few hours the patient was dead. Although there is no more imperative rule in surgery than early operative interference in strangulated hernia, cases of this kind unfortunately will occasionally occur, due, no doubt, generally to the disinclination of a patient to submit, at the proper time, to the only really safe and proper treatment—herniotomy. It becomes us never under any circumstances to yield to the entreaties of a patient or his friends for delay without at any rate warning them of the extreme danger of procrastination, and at the same time urging upon them as forcibly as possible the necessity for and safety in immediate interference.

Dr. Arnison said that it was some time since he had been led to look upon the operation for strangulated hernia as one of the most successful of serious operations. In his opinion the cases generally did well, but it was of extreme importance that the operation should be undertaken early. Dr. Arnison further alluded to the rareness of

the operation in the Newcastle Infirmary ; only some four or five cases occurred on an average in the year. The reason for this was probably to be found in the fact that the medical men of the district generally operated upon the cases themselves.

Dr. Heath congratulated Mr. Page upon the success of his operation, and agreed with him in the opinion expressed in his paper, viz., that the success of the operation is greater at the present time than it formerly was. He thought the chance of success was much greater when the sac was not opened.

CASES OF EPILEPTOID SEIZURES.

By FREDERIC C. COLEY, M.B.

W. E., æt. 45, an in-patient in a London hospital. About fourteen years ago, she was a patient in the same hospital for stone in the bladder and "falling of the womb." The stone was removed and a pessary adjusted. Ever since this (and never before) she had been subject to epileptic fits. She has an aura in the ankles; just above the ankles on each leg there is considerable thickening in the subcutaneous fascia. The skin over it is slightly livid red, with visible enlarged capillaries. The swelling on left leg, where the aura is more distinct, is rather larger perhaps. These swellings, however, appeared when patient was 16 years old. She attributes them to disordered menstruation.

November 2nd.—On vaginal examination, uterus retroflexed. On reponing it with the sound, an epileptic fit was immediately produced.

November 4th.—Uterus reponed and a Hodge's pessary inserted; no fit.

November 10th.—A fit, spontaneously, during catamenia.

November 14th.—Uterus found retroflexed in spite of pessary; reponed with finger. A violent fit was excited.

November 18th.—Uterus reponed; no fit.

November 25th.—Uterus again reponed, and an elastic pessary inserted instead of the Hodge.

November 26th.—Uterus still retroflexed, in spite of pessary. Pessary readjusted, with more success as regards keeping the uterus in right position; but patient gradually lapsed into a very curious mental condition. She was excited, but took little notice of what was said or done by those around her. At the evening visit she was still in a half-delirious state. Expression of countenance wild. Complained of a little pain when questioned. A suppository of belladonna seemed to increase the excitement. In the morning the pessary was withdrawn. She gradually recovered her composure in the course of the day.

After this mechanical treatment was discontinued, and the patient was transferred to another hospital.

I have spoken of the fits from which this patient suffered as "epileptic," but doubtless epileptoid would be a more correct description, as they were certainly set up by eccentric irritation, although, doubtless, the nerve centres were unduly liable to respond to irritation.

One point of interest in connection with this case is the fact that fits were caused by the restoration of what is ordinarily considered the normal condition. It would seem, however, that in this patient

retroflexion of the uterus had become natural by use; but there was no reason to suppose that any inflammatory adhesion complicated the case. It was perfectly easy to repone the uterus, although, as the notes show, some difficulty was experienced for a time in retaining it.

The next case is one which has several points of interest.

Y. S., a girl aged 19, the subject of congenital heart disease. First suffered from palpitation and cyanosis at about the age of five or six. There is a somewhat doubtful history of an attack of acute rheumatism, which does not, at any rate, appear to have much affected the cardiac symptoms.

Catamenia appeared about two years ago; irregular and scanty. First suffered from fits about five months ago.

On examination, there is a well-marked systolic bruit heard over the whole of the præcordial region, and beyond.

There is a well-marked cyanosis, which, however, varies in degree from day to day. The fingers are remarkably clubbed. The fits have occurred even several times in 24 hours; but most commonly they have happened in the night. They are preceded by a marked increase in the cyanosis, with a feeling of dizziness in the head; and they are usually followed by a period of coma. Urine and fæces are often voided unconsciously during the fit.

Bromide of potassium had no influence apparently; but after taking two pills of oxide of zinc and extract of hyoscyamus every night, there was a very marked improvement. The fits, which had been before very frequent, ceased altogether for about a fortnight. Then one occurred during a catamenial period. (It should be mentioned that the liability has always seemed greater during the menstrual times.) About a week afterwards, two other very slight fits occurred. Whether the oxide of zinc can claim the credit for this improvement may seem doubtful: but the coincidence is clear.

This patient presents a contrast to the sufferers from true epilepsy. She is intellectually bright, and remarkably cheerful, in spite of the fact that she is quite aware of the hopeless prognosis of her own case.

Apparently, this case supports the theory that blood which is deficient in oxygen acts upon the nerve centres just as a deficient quantity of blood, in setting-up an epileptoid condition. The fact that the fits are always preceded by a marked increase of the cyanosis at any rate suggests this idea.

The third case is one which much more nearly resembles true epilepsy, if, indeed, it should not be regarded as a case of that disease.

G. H., æt. 25. Ten years ago, some coke fell upon his head as he was stooping. He was knocked down by the blow, and had two fits before he was brought home. After he got home he had two more

fits the same day. There was no wound of the scalp. He received medical treatment, and had no more fits for seven years.

The return of the fits was attributed to the fumes of alcohol, as he was employed in filling spirit bottles.

Imbibition strongly denied.

Since the fits have returned they have gradually increased in severity and frequency. They occur most frequently at night, but not uncommonly in the day time. Urine is passed during the fits, but not fæces. The tongue and lips are often severely bitten. The right side is usually more violently convulsed than the left. but sometimes this is reversed. Petit mal is often observed also.

Before the fits the face becomes livid, and nictitation of eyelids is often remarked.

For the last two years the mind has been affected, and now he has well-marked delusions.

Bromide of potassium has not given much relief; indeed, it does not seem to have had any effect lately.

There is a well-defined neurotic family history on both sides.

The father committed suicide, after melancholia for five months. The maternal grandfather was also a sufferer from melancholia. One maternal uncle was epileptic from childhood, fits having been caused in the first instance by fright, but the mind remained unaffected; and, lastly, the mother, from whom I extracted this history with difficulty, is affected with a cacoethes loquendi to an extent which must be considered morbid.

The first question suggested by this case is, how far can we regard the injury as the cause of the disease? I should be inclined to consider it as one factor, the other being a constitution predisposed by hereditary tendency to disordered nerve function.

These cases may serve as more or less typical examples of the conditions under which epileptoid seizures are liable to occur, viz.:—

1. A morbid condition of the nerve centres *per se*: in which they are liable to paroxysmal disturbance of function, although under ordinary circumstances, at least in the earlier stages of the disease, apparently acting healthily. This is true epilepsy.

2. When the nerve centres are themselves healthy, they may be excited to convulsive action by deficient blood supply, or what is the same thing, a supply of blood which is not capable of normally restoring tissue waste. Hence we have convulsions from anæmia, and from stagnation of blood, and as in the case quoted of congenital heart disease, from venous blood in the arterial stream. Epileptoid seizures from acute alcoholism and uræmic poisoning are analogous in their pathology.

3. Reflex convulsions. I should be disposed to consider epileptoid seizures due to old injuries to the head, and tumours of the brain as analogous to reflex convulsions; for in these cases the

fits are due to an extraneous irritation of the nerve centres, and not to an actual morbid condition of the centres themselves. Or at any rate this is half the truth. Probably in many cases of strictly epileptoid reflex fits there is an abnormal irritability of the hemispheres. Where there are convulsions, general or partial, without any loss of consciousness, the hemispheres are probably quite healthy. Syphilitic epilepsy comes under this category, for the most part being commonly due to the irritation of gummatous deposits upon the membranes. In many of these cases the convulsions are apt to be more localised than in true epilepsy, and the consciousness is not always lost.

ON ANÆSTHESIA.

By DAVID DRUMMOND, M.A., M.D., Physician to the Newcastle-upon-Tyne Infirmary.

[Continued from Page 82.]

A brief recital of the two following cases, also characteristic examples of this form of hysterical anæsthesia, viz., *of irregular distributon*, will aid in bringing out several very important points in the general clinical history of these cases. The case already alluded to is of importance on account of the marked prominence of other hysterical phenomena, as well as typically exemplifying the want of uniformity in the distribution of the areas of sensory impairment: but unfortunately I had not the opportunity of carefully investigating in detail the anæsthetic features of the case, convincing myself alone of the fact of its existence and distribution. However, in the following examples—though the cases are not at first sight so distinctly hysterical when taken apart from the anæsthesia—the omission is supplied, and I think it will be seen that in these details will be found sufficient grounds for founding a diagnosis as to the nature of the affection. In relating these cases I shall be as brief as possible, giving prominence alone to the sensory phenomena:—

C. M., a florid, healthy-looking young woman, a servant, aged 18, came under observation, in July 1880, complaining of severe occipital pain, and occasionally frontal headache, backache, nausea, and irregularity of menstruation, symptoms which had been observed for four or five months. It was now discovered that below the knees her legs (skin) were completely analgesic and partially anæsthetic. A slight touch was not felt, but the prick of a pin gave rise to the sense of touch alone. No pain was complained of, even though the pin was thrust underneath the skin in the manner described early in this paper. Whilst, then, a lightly applied pressure was not felt, yet it was found that heat and cold were discovered, though not always distinguished as in Dr. Cockle's case, already cited. A very hot piece of metal, such as could not be borne by the hand of the observer, was described as hot, but not at all painful. A strong Faradic current applied alone to the skin resulted in a prickling sensation, but not pain; however, the same current applied with moistened rheophores to the muscles, inducing strong contraction, caused intense pain. When these observations were made the rest of the body was nearly normal, as regards sensation, or perhaps more correctly speaking, there was a slight general impairment. In a few days the arms became also analgesic, resembling the legs,

excepting in the direction of thermal impressions (for these were with difficulty appreciated), and both cold and warm bodies appeared to be warm. Subsequently it was discovered that the whole body, even to the tongue, was equally affected with this exaggerated analgesia and incomplete anæsthesia. This general impairment passed off suddenly, leaving the legs and part of the body affected. In this manner the phenomena varied from time to time, both in the distribution and the degree of the impairment. After a few weeks the headache went away, and before the case was ultimately lost sight of, the anæsthesia had also vanished. In this case there was the globus well marked, and absence of optic neuritis and no alteration in the reflexes, superficial or deep.

The next case I have to note resembles in many features that just related.

The subject of this case, a young woman, aged 17, a worker in a pottery, was admitted into the Newcastle Infirmary in July, 1880, complaining of severe pain in the back of her head, which had lasted for twelve months. By a doctor's orders her head had been shaved and blistered several times; leeches also had been applied, without any relief. Sometimes the headache was so severe "as to cause her to lose her senses." She stated she had been unconscious for two months before admission to hospital. This grave statement, on being properly sifted by application to her immediate friends for the truth, was found to be incorrect. However, for three or four days, consequent on a severe attack of headache, she had lain in a sleepy semi-unconscious condition. She had never vomited; her vision was unimpaired. The globus hystericus was the only common hysterical symptom of which she complained. It was found that both lower extremities were completely analgesic; every species of torture applied to the skin of either leg failed to elicit the slightest complaint of pain. Tactile sensibility was normal; the slightest touch was felt and referred accurately to the exact situation. Thermal impressions were appreciated normally. The Faradic current applied to the muscles caused intense pain. When the patient first came under observation these phenomena were confined to the legs, but subsequently the whole body, except the abdomen, was incompletely anæsthetic—tactile sensibility nearly lost—as well as analgesic. However, an *exquisite stimulus* was always felt as a touch sensation, though a light touch was unobserved. Occasionally we found the face and one upper extremity normal, and even now and again the legs were perfectly sensitive.

In this case also—though not so frequent a symptom as in the former—it was observed occasionally that thermal impressions were felt and distinguished, when the same degree of pressure made

with the same body at the temperature of the skin was not noticed. The anæsthesia varied in the most remarkable manner, the most constant phenomenon being analgesia of the lower extremities. The case is still under observation, for the patient comes occasionally to the Infirmary as an out-patient. The headache continues, and the sensory impairment is always found to be more or less present. When seen last, viz., on the 11th of January, the condition was noted to be that of general analgesia, whilst tactile sensibility was normal. The gait was always observed to be normal. There was an absence of optic neuritis and vomiting.

The phenomenon of retarded sensation was not noticed in either of these cases, nor was it found that the sensation suddenly disappeared, though the stimulus was kept up; also there was no difficulty in referring the sensation to the exact spot stimulated, all of which phenomena are important, and will be discussed when treating of the anæsthesia of organic origin. Before passing away from this part of the subject, I might be permitted to mention very briefly a case, in a measure allied to, though differing from these typical cases of hysterical anæsthesia of irregular distribution which we have just been discussing. A stout, healthy-looking woman of 32 years, the mother of several children, was admitted into the Newcastle Infirmary, complaining of pain in the right inguinal region shooting down the leg, backache, and numbness of the right leg, especially from the hip to the knee. In this case, the right ovary was exceedingly tender, and there was extensive abrasion of the os uteri. The right leg was completely analgesic, whilst tactile sensibility was but slightly impaired—*i.e.*, on comparing the two legs with the points of an æsthesiometer, one point on each limb, and pressure applied evenly, it was found that the sensation was best marked on the left leg. Thermal sensibility was impaired to about the same extent as tactile. The interrupted current applied to the muscles caused pain. The sensory impairment affected the whole limb, regardless of any special nerve distribution. The insertion of a pin into the skin at once produced a tingling sensation in the limb, "pricking like needles and pins," as the patient described the sensation of which she complained so much. Sensation was normal elsewhere.

Since observing this case, I have found in several uterine cases in which there was a complaint of numbness in the legs and "needles and pins"—a symptom well known to be frequent in such cases—that analgesia also existed. I shall not stop at present to discuss the connection between these cases and the more purely functional variety.

The points of importance in distinguishing hysterical anæsthesia of the irregular distribution variety, from sensory impairment hav-

ing an organic origin, have been made almost sufficiently obvious. I would just lay stress upon the prominence of analgesia of the skin, whilst a strong Faradic current causes pain in the muscles ; the occasional combination of lost tactile sensibility, with the capability of appreciating thermal impressions—the rule in organic cases being the association of thermal with tactile sensibility.

[TO BE CONTINUED].

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